

Remarks/Arguments

Claims 1 – 14 remain pending in this application. In the Office Action of February 27, 2003 the Examiner indicated that claims 2, 5, 7 – 10 and 12 – 14 were objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully acknowledges the Examiner's indication of the allowable claims.

Applicant also wishes to point out that as the Examiner indicated the claim 5 was allowable, it would appear that dependent claim 6 should also be allowable, as dependent claim 6 depends upon claim 5.

With the above in mind Applicant elects to defer rewriting the objected to claims in independent form until the Examiner has fully considered the remarks below.

In the Office Action of February 27, 2003, the Examiner rejected independent claim 1 under 25 U.S.C. § 103(a) as being unpatentable over Fleming (U.S. 5,867,302) in view of Wilber et al (U.S. 5,608,282). Applicant notes as follows.

The present invention describes and claims an acoustical transducer that converts a mechanical motion into acoustical energy. As recited in claim 1, the invention makes use of a diaphragm and a support that fixes one generally linear portion of the diaphragm along a first direction. At least one actuator is operatively coupled to the diaphragm. The actuator is generally aligned with but mutually spaced from said fixed generally linear portion of the diaphragm, and in a second direction transverse to said first direction by a distance that produces a curvature of the diaphragm and which accommodates a

movement of the diaphragm that corresponds to the travel of the actuator. The diaphragm movement is amplified with respect to the actuator travel.

Turning to the rejection of claim 1, Applicant notes initially that Fleming and Wilber et al disclose what are essentially bistable switches. They are not loud speakers and there is no teaching or suggestion that their purpose is to produce an acoustical output.

Expanding upon the above, the Fleming device is intended as “a non-volatile memory element”. As shown in Figures 7A and 7B, a mirror can be mounted at the midpoint of the Fleming membrane for optical switching. Furthermore, the number 18 in Fleming at this midpoint is not an actuator. In short, Fleming does not teach the claim construction for the invention recited in Applicant’s independent claim 1. Indeed, this is underscored by the Examiner’s observation that Fleming’s at least one actuator is not oriented in a second direction transverse to said first direction.

Accordingly, it is respectfully submitted that the principle reference of Fleming fails to support a rejection under 35 U.S.C. § 103.

Applicant notes that the Examiner then turned to the Wilber ‘282 patent to makeup for the deficiencies of Fleming. It is respectfully submitted that given that Fleming, as noted, is directed at a bistable switch, there would be no reason for one of ordinary skill in the art to turn to Wilber et al in order to construct an acoustic transducer that converts mechanical motion into acoustical energy. Accordingly, it is respectfully submitted that the Wilber ‘282 patent is not properly combinable with Fleming.

Furthermore, even if one should combine the Wilber ‘282 patent with Fleming, it is noted that the Wilber ‘282 patent describes a “superconducting switch”. A

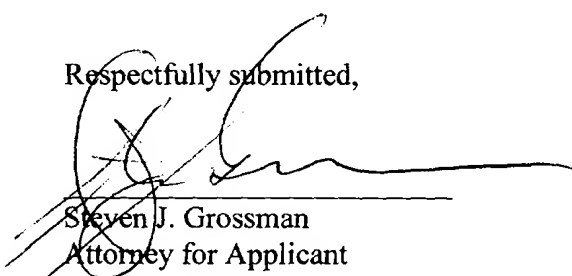
piezoelectric subassembly 152 displaces the substrate 12c that has a superconductor 14c bonded to it. This displacement 154 induces a strain in the superconductor to change its resistivity curve as a function of temperature. Indeed, as correctly noted by the Examiner, the Wilber et al construction does not meet Applicant's claim requirement that the diaphragm movement be amplified. In that sense, Applicant respectfully submits that should one even combine Fleming with Wilber et al, the result is that one still has failed to generate a prima facie case of obviousness under 35 USC § 103 as applied to independent claim 1.

Finally, in support of an allowance herein Applicant wishes to note that he agrees with the Examiner's statement at the bottom of page 3 of the Office Action of February 27, 2003 wherein the Examiner noted that the prior art failed to teach or suggest various features of independent claim 1 as pending herein.

In view of the above, Applicant respectfully submits that claims 1 – 14 are in condition for allowance, and an allowance at an early date is solicited.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

Respectfully submitted,



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